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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/038,880

12/31/2001

Murali Krishnaswamy

PH-01-01-03

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02/25/2005

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EXAMINER

LEUNG, CHRISTINA Y

ART UNIT

PAPER NUMBER

2633

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/038,880	Applicant(s) KRISHNASWAMY ET AL.	
	Examiner Christina Y. Leung	Art Unit 2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4-15-2002</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because elements in the figures should include descriptive as well as numeric labels. In particular, the elements of Figure 1 only currently represented as blank boxes should include descriptive labels. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Smith et al. (US 2003/0020977 A1).

Regarding claim 1, Smith et al. disclose a method of establishing a service connection between first and second network nodes in a WDM optical network for a plurality of network users:

receiving, from each network user, user preferences prioritizing a plurality of decision criteria defining preferable characteristics of the service connection (page 3, paragraphs [0046] and [0049]; page 4, paragraph [0062]);

selecting, using a prescribed algorithm, a path and a channel wavelength at which information is to be conveyed over the path between the first and second nodes based on the plurality of decision criteria as prioritized in accordance with the user-preferences (page 3, paragraph [0047]; and

interconnecting the first and second network nodes over the selected path with the selected channel wavelength (page 3, paragraph [0047]).

Smith et al. disclose that the user determines constraints and thresholds for each requested service connection (page 3, paragraphs [0046] and [0049]; page 4, paragraph [0062]). Therefore, Smith et al. inherently discloses that the method of establishing the connection includes receiving user preferences prioritizing some constraints/decision criteria over others.

Regarding claim 14, Smith et al. disclose that the WDM optical network is a WDM optical mesh network (Figure 1).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al.

Regarding claim 2, Smith et al. do not specifically disclose a ring network, but ring networks are well known in the art as a choice of topology for connections between users, and Smith et al. already suggest that the network elements in their system may include some that are connected in a ring (Figure 1). It would have been obvious to a person of ordinary skill in the art to specifically have a ring topology in the method disclosed by Smith et al. as an engineering design choice of a way to provide the desired connections between the network elements, particularly since ring networks are advantageously designed to provide multiple paths between any two elements.

Regarding claims 3 and 4, Smith et al. disclose that the user-preferences rank the plurality of decision-criteria and that the ranking reflects an absolute priority in which higher ranked ones of the decision-criteria are decisive over lower ranked decision-criteria (page 7, paragraph [0101]).

Regarding claim 5, Smith et al. disclose decision criteria such as path length, but do not specifically disclose that the plurality of decision-criteria include all the criteria among: in-service wavelengths, path length, in-service TRP savings, fragmentation, and utilization rate. However, such considerations are all known in the networking art as concerns for

implementation of network connections. It would have been obvious to a person of ordinary skill in the art to include evaluating these additional criteria in the method disclosed by Smith et al. in order to optimize the path and wavelength assignments as desired according to these considerations. Examiner also respectfully notes that the claim only recites “prioritizing” criteria include those listed; Smith et al. already disclose prioritizing criteria that they do not specifically disclose in the sense that the method gives those criteria a “priority” of none/zero.

Regarding claim 6, Smith et al. disclose that the plurality of decision-criteria include path length (page 4, paragraphs [0055-0062]).

Regarding claims 7-10, Smith et al. disclose that the user-preferences establish relative weights assigned to each of the decision-criteria, wherein the prescribed algorithm employs a metric in which each decision-criteria is assigned a numerical value and wherein the metric is defined as a sum of the products of each decision-criterion and a one of the user preferences associated therewith (page 7, paragraphs [0101-0105]).

Regarding claims 11 and 12, Smith et al. disclose that step of selecting the path and the channel wavelength includes the step of selecting a path and channel wavelength that maximizes the metric (page 5, paragraph [0076]).

Regarding claim 13, Smith et al. do not specifically disclose that the relative weights assigned to each decision-criterion reflect an absolute priority in which higher ranked ones of the decision-criteria receive a user-preference that is at least one order of magnitude higher than a lower ranked decision-criteria. However, it would be well understood that the weights disclosed by Smith et al. may be a variety of values, including a value that may be an order of magnitude higher than another. It would have been obvious to a person of ordinary skill in the art to provide

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a user-preference that is at least one order of magnitude higher than a lower ranked decision-criteria in the method disclosed by Smith et al. if a user desired one criteria to be much more important than another. Smith et al. already suggests that an unimportant criterion may be explicitly weighted "0%" (page 7, paragraph [0106]).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Y. Leung whose telephone number is 571-272-3023. The examiner can normally be reached on Monday to Friday, 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571-272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christina Y Leung
Christina Y Leung
Patent Examiner
Art Unit 2633